209105 JPRS 83454 12 May 1983

# Worldwide Report

EPIDEMIOLOGY No. 318

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# WORLDWIDE REPORT

# EPIDEMIOLOGY

No. 318

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DRY WEATHER BENEFICIAL IN BATTLE AGAINST DENGUE FEVER

Brisbane THE COURIER-MAIL in English 18 Feb 83 p 5

[Article by Ken Blanch]

[Text]

# TOWNSVILLE.— Dry weather is helping health authorities in north Queensland to fight the onset of an epidemic of dengue fever.

They have been trying to eradicate the outbreak since early last year and have been aided by the absence of the normal northern monsoonal season with its flood rains.

Small armies of health officials have been inspecting houses and backyards to eradicate potential mosquito-breeding sites before the wet sets in

The fever — there were about 2000 reported cases in north Queensland last year — is carried by mosquitoes.

The main outbreak last year was in April and May, immediately after the wet season ended.

The heavy rains had filled tins and other discarded household receptacles, old tyres and dumped car bodies and other junk with water, creating perfect breeding places for the dengue-carrying mosquitoes.

But with the dry weather, only three suspected cases have been reported in the area so far this year.

Townsville's chief health surveyor, Mr Peter Foxwell, said yesterday his staff had worked constantly during the dry weather to eradicate mosquito breeding risks from the 30,000 dwellings in the region.

He said one of the main dangers had been identified as indoor water plants.

Householders could minimise the risk by emptying the water from their plants and cleaning receptacles every few days, but often they forgot to do so.

Several hundred cases of dengue occurred in the Townsville city area and its neighboring Thuringowa Shire last year.

#### PRESS REPORTS ON PROBLEMS WITH SPREAD OF CHOLERA

#### Officials Note Statistics

Dhaka THE BANGLADESH TIMES in English 20 Mar 83 p 3

[Text] A total of 2,618 persons died of cholera and diarrhoeal diseases so far in the eleven districts of the country since September last year, officials sources told BSS on Thursday, reports BSS.

The figure included 458 deaths out of 6,995 attacks recorded since January this year.

The sources said that since last September, when the disease first broke out in epidemic form during current season, a total of 1,73,382 persons were attacked out of which 2,618 died.

The district-wise break up of the attack and death are: Dhaka (attack 8,804 death 188), Rangpur (attack 74,811 death 133), Barisal (attack 12,021 death 339), Patuakhali (attack 22,292 death 493), Pabna (attack 6,542 death 139), Faridpur (attack 1,621 death 228), Jessore (attack 10,491 death 225), Khulna (attack 25,873 death 186), Sylhet (attack 686 death 115), Comilla (attack 7,645 death 463) and Mymensingh (attack 2,596 death 109).

The district-wise break-up of attack and death since January to, March 14 is as follows: Dhaka (attack 160 death 8), Barisal (attack 3,032 death 199), Patuakhali (attack 440 death 46), Pabna (attack 414 death 10), Faridpur (attack 525 death 65), Jessore (attack 476 death 31), Khulna (attack 964 death 68) and Comilla (attack 984 death 31).

There has been no outbreak of the disease in the districts of Rangpur, Sylhet and Mymensingh during this period.

Health Ministry officials said that about 500 medical teams with doctors and para-medics had been working in the affected districts to combat the disease and that there was no shortage of vaccine, saline and medicine in the thana health complex and district headquarters.

#### Deaths in Bhola, Bagerhat

Dhaka THE NEW NATION in English 21 Mar 83 p 2

[Text] Bhola, 22 Mar--Sixty persons died and 459 persons were attacked by cholera in different thanas of the subdivision during the last 15 days, according to a telegraphic message.

Of the dead persons, 37 died in Bhola thana, nine in Borhanuddin thana, two in Dhaulatkhan thana and 12 in Charfession thana, according to Deputy Civil Surgeon Office Source.

The source also said that medical teams with sufficient medicine are working in the affected areas and a 11 member naval-medical team headed by Surgeon Lt. Tapan Kanti Das came here Sunday with sufficient medicine. They started work from yesterday. The DC, Barisal and the SDO, Bhola visited the affected areas.

#### Bagerhat

Bagerhat Correspondent adds: Cholera that broke out in Morrelganj, Sarank-hola and Kachua thanas under Bagerhat about three weeks ago has not yet been subsided according to a telephonic message.

According to a report about 100 persons have so far died of cholera in those three thanas and about 1000 people have not been suffeiring from the diarrohea but according to Deputy Civil Surgeon of Khulna the death toll of cholera raised to 84 in those affected three thanas.

The worst affected area is upgraded Morrelganj thana where 61 out of 994 persons died of cholera.

### Situation Reviewed

BSS adds: The cholera situation in the district was reviewed at a meeting held here recently under the chairmanship of the Deputy Commissioner, according to an official handout issued in Dhaka yesterday night.

It was revealed in the meeting that no case of cholera was reported from any area of the Patuakhali district after January 28.

The meeting took a number of decisions to strengthen preventive measures which include demolition of hanging latrines on rivers and canals by March 31. The meeting also decided to take drastic steps against sale of exposed foods-stuff.

The meeting was informed that out of 295 tubewells allotted for the district, 50 have already been sunk. Besides, 58 tubewells have been allotted for the cholera affected areas.

Out of a population for 18 lakh of the district, 3 lakh people have been innoculated during the period from November to February last. Besides, health education programmes have been geared up in the district to motivate people about health habit and against health hazards.

#### Barisal Death Statistics

Dhaka THE BANGLADESH TIMES in English 21 Mar 83 p 2

[Text] Barisal, 20 Mar-One thousand three hundred forty five persons died and 1190 were attacked by cholera in the district since November last year says official source The district control room told Times that cholera first broke out in the district in November last year and continued upto middle of January this year. During the time 1122 died and 8538 were attacked in the district. The fresh cholera attack was reported in the district on February 20 this year and 223 persons died and 3332 were attacked till date from February 20. Control room said the situation of Perojpur and Bhola subdivision has not yet improved. One hundred eighty four were attacked and 80 died there. Eight medical teams from Barisal Medical College have gone to the affected areas.

#### Khulna Cholera Toll

Dhaka THE NEW NATION in English 30 Mar 83 p 8

[Text] Khulna, 29 Mar—Cholera situation has further deteriorated in this port city. At least 20 persons died during the current month. More than four hundred patients were admitted in sadar hospital. Among them 31 were admitted on Monday. Of them, three died, said an official source.

Patients are lying on the hospital floor due to shortage of beds.

Hospital sources said, saline stock was not sufficient and would be exhausted shortly if fresh supply was not rushed.

#### BRIEFS

BANDARBAN MALARTA DEATHS—March 14—Seventeen people died of and many people have been suffering from malaria in upgraded Alikadam thana according to delayed reports reaching here, 17 people died in the worst affected areas of Babupara Toyenmouza, Chionpara, Sangumouza, Janalipara, and Amtoli of the thana under Bandarban subdivision in last one month. Hundreds of patients still struggling with the disease. Though the thana was upgraded recently it lacks medical facilities and till today no anti-malaria measure is learnt to have been taken. [Text] [Dhaka THE NEW NATION in English 15 Mar 83 p 1]

CHILDREN'S DIARRHEA DEATHS—Rajshahi, 23 Mar—Twenty children died of diarrhoeal disases at the Rajshahi Medical College Hospital in the last seven days. Meanwhile, 80 children were admitted at the hospital with diarrhoeal disease. The children who died were aged between one year and five years according to hospital source. Children suffering with diarrhoea accompanied with vomiting are being admitted to hospital. It is also reported a good number of diarrhoea victims are still at their own homes. When contacted Civil Surgeon of Raishah confessed the massive attack of diarrhoea among the children and said that use of impure drinking water, exposed baby food and unhygienic conditions caused diarrhoea. Precautionary measures have already been taken by the relevant authority. Four cholera vaccination centres were also opened within the municipal area and inhabiatnts of the town and its suburbs have also been alerted regarding diarrhoea through antidiarrhoeal campaign by the municipal authority. [Text] [Dhaka THE BANGLADESH OBSERVER in English 24 Mar 83 p 12]

BRAHMANBARIA CHICKENPOX DEATH--Brahmanbaria, 23 Mar--Ashed Mia (3) son of Afis Khan of village Kachati under Brahmanbaria thana died of chicken pox recently, according to a telegraphic message. It is learnt that the disease has broken out in an epidemic form in Kachati, Attla, Badeshwar, Chandpur and different areas of Brahmanbaria Pourashava. Over 200 persons mostly youngsters have fallen victim to the disease in last few days. [Text] [Dhaka THE NEW NATION in English 24 Mar 83 p 2]

SAO PAULO HAS HIGHEST INCIDENCE OF MENINGITIS NATIONWIDE

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 27 Mar 83 p 20

/Text/ Brasilia--Two-thirds of the cases of meningitis recorded in the country are occurring in Sao Paulo\_State, according to a survey made by the Epidemiological Vigilance Branch /SVE/ of the Ministry of Health /MINSA/, based on data furnished by the states. Meanwhile, experts from the National Division of Epidemiology point out that, of the 11,098 cases of meningitis reported by last year's SVE, only 922 were of the meningococcic type, which is more worrisome from the public health standpoint in that it leads to death.

The experts assert that, in 1982, no outbreak of meningococcic meningitis was reported, although at the end of the year and beginning of 1983, outbreaks of the viral disease occurred, especially in Sao Paulo. But meningitis caused by a virus, besides being less dangerous, cannot be avoided with vaccine or cured with special treatment. The disease appears, goes through its cycle and then disappears.

According to criteria established by the experts, meningitis—an infection of the meninges caused by various germs—is divided into three groups: the first includes meningococcic meningitis and meningococcemia (the most serious form of the disease); the second covers cases of meningitis caused by other etiologies, that is, which are the result of some other infection in the organism, such as tuberculosis, otitis and pneumonia; and the third group comprises non-specified diseases, that is, those whose origin is not known.

According to the same experts, it is necessary to make a better identification of the various types of meningitis inasmuch as there is a great number of diseases whose causes are still unknown. Therefore, the Division of Epidemiology and the National Division of Public Health Laboratories, in cooperation with the central laboratories of the various states, plan to make an effort to achieve better identification of these causes.

Among the variations of meningococcic meningitis, which are the most serious forms of the disease transmitted by bacteria, are the following categories used to classify the sources: A, B, C, X, Y, W, 135 and 29 E. According to the experts, aside from types A, B, E and C, the others rarely occur. And vaccines exist only for groups A and C which are responsible for the major epidemics. But the incidence of meningococcic meningitis is dropping, according to the findings of MINSA's SVE. This is borne out by a list of

figures presented by the experts covering the period from 1976 through 1982, which reads as follows: 2,768 cases the first year; 2,299 the following year; 2,265 in 1978; 2,140 in 1979; 1,568 in 1980; 1,229 in 1981; and 922 cases last year. However, no figures have yet been determined for Sao Paulo from August to December. As the disease peaks during the cold months, principally June and July, no appreciable increase is expected in the present range of figures in which, of the 922 cases, 196 were recorded in Sao Paulo from January to July 1982.

To illustrate the decline in meningococcic meningitis compared with all other types of the disease recorded in the country, division experts compiled a chart covering the period from 1970 to 1981 comparing the various types. In 1970, the cases of meningococcic meningitis amounted to 10 percent of the total cases of meningitis reported in the country. This figure rose to 30.6 percent in 1973 and to 38.9 percent in 1974; it fell to only 37.9 percent in the previous year /as published/ and continued to decline in subsequent years. In 1981 it reached 8.9 percent of the total and, last year, estimates indicated a level of 12.03 percent.

8568

INCIDENCE OF TUBERCULOSIS REACHED 87,000 IN 1982

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 26 Mar 83 p 9

/Text/ Brasilia--Last year, 87,824 cases of tuberculosis were discovered in the country by the various state health care units; most of the cases were in the southeastern area which had a total of 40,450, of which 16,223 were in Sao Paulo State. Meanwhile, according to an explanation given yesterday by experts from the Pneumology Division of the Ministry of Health /MINSA/, the total number of cases discovered in Brazil was still lower than the target set for 1982 when the health authorities expected to discover and treat 113,998 cases of tuberculosis. Thus, the total number discovered amounted to 77 percent of what was programed.

In Sao Paulo State they expected to discover 19,686 cases of tuberculosis, and the 16,223 cases reported amounted to 82.5 percent of that total. According to the MINSA experts, although the tuberculosis program is improving each year of its development, there are still imperfections due to various factors. Among there are the criteria used by the states to set up health units which are often installed in areas of dense population but which do not offer ideal coverage.

Again according to the MINSA experts, it is estimated that about 35 million Brazilians are infected with the tuberculosis bacillus. In addition to the task of discovering and treating persons afflicted with the disease, the program to be carried out by the states in 1982 included the vaccination of 5,692,051 children up to the age of 14 years, but only 3,726,401 were actually reached.

8568

#### BRIEFS

OFFICIAL TUBERCULOSIS FIGURES--Rio de Janeiro, 26 Mar (AFP)--The Health Ministry reported today in Rio de Janeiro that about 87,000 cases of tuber-culosis were registered in Brazil in 1982, and that about 35 million Brazilians are carriers of the Kock bacillus. The Health Ministry reported that in the southeastern region there were 40,000 new cases of tuberculosis in 1982; and that in the northeastern region there were 27,000 cases. [Text] [Paris AFP in Spanish 1505 GMT 26 Mar 83 PY]

CASES OF MALARIA--The Public Health Service reported that there were 221,000 cases of malaria in Brazil in 1982, which means that there was a 10-percent increase in the disease in comparison to 1981. Moreover, the Health Ministry reported that there were 136,000 registered cases of schistosomiasis in 1982. [Text] [Rio de Janeiro O GLOBO in Portuguese 29 Mar 83 p 7 PY]

MEASLES OUTBREAK HITS INDIANS—The National Indian Foundation (FUNAI) has disclosed that some 2,000 Caiovas Indians have been placed in quarantine to avoid the spread of a measles outbreak that occurred 1 week ago. According to FUNAI, the outbreak has already caused two deaths and some 43 indians have very high fever. [Text] [Rio de Janeiro O GLOBO in Portuguese 13 Apr 83 p 5 PY]

MINAS TB INCIDENCE--Belo Horizonte--Minas Gerais is the state which registered the sharpest increase in cases of tuberculosis between 1981 and 1982, according to a report given by Dr Joao Alhais, who participated in the Second National Meeting for the evaluation and Programing of Tuberculosis Activities, held in Porto Alegre. According to Alhais, 51.2 percent more cases of tuberculosis were discovered in 1982 than in the previous year; a total of 11,532 persons were afflicted. /Text/ /Rio de Janeiro O GLOBO in Portuguese 14 Mar 83 p 20/8568

HEPATITIS OUTBREAK--Health authorities disclosed that contaminated water has already caused 17 cases of hepatitis in Santo Andre in less than a month and that the number could reach 30 if other cases are confirmed.

[Sao Paulo Radio Bandeirantes Network in Portuguese 1000 GMT 23 Apr 83 PY]

## PRESS REPORTS MYSTERY DISEASE OUTBREAK IN JODHPUR

Speculation on Causes

Calcutta THE STATESMAN in English 21 Mar 83 p 9

JAIPUR, March 20.—Successive years of drought might be one of the factors behind a series of deaths in some villages in Jodhpur district. According to the latest official count, 59 people have died of a "mystery disease".

But reports following a visit to the Shergarh tehsil of Jodhpur by a team of medical experts suggest that malnutrition coupled with sudden changes in weather could have caused the deaths. Unofficial sources put the toll at

Malnutrition is attributed to the fifth consecutive year of drought in some areas of western Rajasthan in the heart of the Thar desert.

The sarpanch of Solankiatala vil-

lage—one of the worst-hit areas-has been quoted in some reports

as saying that many in Shergarh

as saying that many in Shergarh tehsil were living on one meal a day for the past five years.

The sarpanch, Mr Narpat Singh, is also said to be preparing a list of persons who died from "hunger".

Villagers in Jodhpur reportedly told the medical experts that hunger was one of the main causes of their illness.

The State Relief Minister Mr

The State Relief Minister, Mr the drought-relief works.

Hanuman Prabhakar, told the Vidhan Sabha yesterday that there had been no starvation death in the control of a family has got employment on the drought-relief works. Shergarh tehsil of Jodhpur district.

He attributed the deaths to lack of medical attention. Many, he said, had died because the dispensaries were far away from their villages and they could not reach the plac-

es on time.

Reports from Jodhpur also suggest that the miseries of people have intensified because of the limited employment opportunities on

Symptoms Described

New Delhi Patriot in English 19 Mar 83 p 8

[Text] Jaipur, March 18 (PTI) -- A mysterious killer disease has caused at least 55 deaths in the drought-affected Shergarh teshil of the desert district of Jodhpur, according to official reports reaching here.

The Director Medical and Health Services (DMHS) Dr Gyan Prakash told PTI that the deaths occurred during the last one and a half month.

The situation, however, is now under complete control after several medical teams were rushed to the affected village, he added.

The reports reaching here from Jodhpur say the main centre of the killer disease was a village Solankiya Tala, about 113 km from Jodhpur. Those died included seven children and 17 women. About 200 villagers are still suffering from the disease the reports say. Mr Prakash said the disease begins as a severe fever and leads to an attack of pneumonia extremely weakening the patient.

#### BRIEFS

VIRUS DISEASE OUTBREAK--The Union minister for health and family welfare, Mr. B. Shankaranand, was on Thursday informed about the research work being done at the National Institute of Virology (NIV) here, especially on the recent outbreak of Kyasanur forest disease (KFD) in Belthangadi taluka of Karnataka, reports PTI. The minister, during his visit to the institute, was informed by the NIV director, Dr. (Miss) Khorshed M. Pavri, that the outbreak was caused by the KFD virus possibly triggered by the clearing of the nidle state forest there. The virus has been isolated by the NIV scientists from ticks in the area, Dr. Pavri said. [Text] [Bombay THE TIMES OF INDIA in English 19 Mar 83 p 15]

JAUNDICE CASES REPORTED—Over 100 jaundice cases, mostly in Ashoknagar, Marimnagar and Mominpura areas of Beed city, have been detected. The public health deputy collector, Mr. Taherbhai, told UNI that jaundice spread in Beed city owing to impure drinking water. [Text] [Bombay THE TIMES OF INDIA in English 20 Mar 83 p 6]

#### BRIEFS

CHICKEN POX, RABIES IN BANDUNG REGENCY -- It has been reported that at least one 9-year old child died and dozens of other people were provided with intensive care as a result of an epidemic of chicken pox which affected the villages of Cipatat and Cempaka Mekar in Bandung Regency recently. To prevent the spread of the disease, the Community Health Center in Cipatat Sub-District immediately undertook a mass inoculation campaign and sent seriously ill patients to the nearest hospital. A health official of the Bandung Regency regional government said: "Because of the speed with which the disease was reported and preventive action was taken, we hope that in the next 2 to 3 days we will be able to bring the disease under control." Meanwhile, HARIAN UMUM AB quoted a statement by Kusdinar, chief of the General Affairs Section of the Bureau of Pharmacy Affairs, as stating that in the course of 1982 at least 2,701 residents of the city of Bandung were affected by rabies. He said that the animals biting the victims of the disease consisted of 2,400 dogs, 149 cats, 108 monkeys, and a horse, a rat, and a civet cat. [Excerpts] [Jakarta HARIAN UMUM AB in Indonesian 28 Feb 83 p 2] 5170

MALARIA EPIDEMIC IN SOUTH CIAMIS REGENCY—An epidemic of malaria has since November 1982 affected the village of Ciparanti in Sindangsari Sub-District, Cimerak District, Ciamis Regency, in the southern part of West Java. Recently, malaria has increased along nearly the whole south coast of Ciamis Regency. According to Dr Mochamad Bhadra, chief of the Health Service of Ciamis Regency, the cause of the malaria is the Anopheles Sundaicus mosquito, which flourishes in the marshy areas along the coast. In the southern part of Ciamis Regency there are thousands of hectares of salt marshes which are breeding places for the malaria—bearing mosquito (Anopheles Sundaicus). Doctor Bhadra went on to inform a MERDEKA representative that at present there are no reports of deaths from malaria because the Health Service of Ciamis Regency has undertaken radical action to wipe out the disease, using Chloroquine, antimalarial injections, and administering blood tests to the residents of the area where the epidemic has spread. [Excerpts] [Jakarta MERDEKA in Indonesian 28 Feb 83 p 4] 5170

RABIES SPREADS IN CITY OF BENGKULU--In the city of Bengkulu [South Sumatra] an epidemic of rabies has been spreading. For that reason every person owning a dog has been asked to tie up his dog in his own yard or wherever he can be kept safely. This was the substance of a statement issued by the Animal Health Service of the city of Bengkulu, signed by Doctor Bachtiar, chief of the office. Doctor Bachtiar could not state how many dogs were in Bengkulu when he was

asked for a statement on Friday [25 February]. However, according to one of the employees in the office, who did not wish to have his name mentioned, it is considered that there is not enough serum to inoculate the dogs in the city. In addition, there are not enough funds and labor available to do the job. Based on data obtained by ANTARA News Agency from the Regional Office of the Ministry of Health in Bengkulu Province on Friday [25 February], it appears that cases of dogs biting people have been declining in number. However, in terms of the number of people who have died, it appears that the figures are continuing to increase. [Excerpts] [Jakarta MERDEKA in Indonesian 28 Feb 83 p 2] 5170

RABIES IN BENGKULU--Not long ago the Animal Husbandry Service of Bengkulu Minucipality issued a bulletin requesting all dog owners in the municipal area to keep their dogs tied up, day and night. The bulletin was issued in response to the spread of rabies in the region, including the Bengkulu area. The bulletin stated that any dog found running loose would be destroyed by the rabies control team. /Text/ /Jakarta MERDEKA in Indonesian 2 Mar 83 p 9/ 6804

RABIES IN PEMATANG SIANTAR -- In February, eight persons were bitten by rabid dogs in Pematang Siantar Municipality and Simalungun Regency in North Sumatra, including two who died because they were given antirabies shots too late, a MERDEKA correspondent reported. News of the spread of rabies in Pematang Siantar and Simalungum Regency was received in a letter from the Region I, Medan, Veterinary Laboratory and Animal Disease Training Office, dated 24 February 1983, and signed by Veterinarian Th. Adat Peranginangin. said the dog that had bitten Ompo Warta Barita was found to have rabies. was the mother of the MERDEKA area correspondent. The 70-year-old woman was bitten by a dog in the Simalungun Village on Monday afternoon, 21 February, and was rushed for vaccination. The MERDEKA correspondent telephoned M.J.T. Sihotang, mayor of Pematang Siantar, regarding the findings on this dog, and after receiving this information, the mayor ordered the Animal Husbandry Service to take the preventive measure of vaccinating all dogs owned by persons in Pematang Siantar and its environs. When the Pematang Siantar Veterinary and Animal Husbandry Services received this order from the mayor, they did not know what to do since the services did not have enough rabies vaccine for mass-scale vaccinations. Hospital chief Dr Undang Gani told MERDEKA that the two persons bitten by rabid dogs died because antirabies vaccine was administered too late, and they were imprudent in believing the bites were harmless. /Exceprts/ /Jakarta MERDEKA in Indonesian 7 Mar 83 p 4/ 6804

RABIES IN CENTRAL KALIMANTAN—The Central Kalimantan Regional Government has declared three Level II regions support areas, that is the Palangka Raya municipal area and Kapuas and Gunungmas Regencies, to prevent the spread of rabies which has stricken the western portion of Central Kalimantan. Veterinarian Rusli Harahap, chief of the Central Kalimantan Level I Animal Husbandry

Service, told ANTARA that since 1978 the eastern portion of Central Kalimantan which consists of the Leyel II regions of North Barito (BARUT), South Barito (BARSEL), East Barito (BARTIM) and Murung Raya (MURA) has suffered from rabies epidemics, particularly the BARUT and BARSEL areas. Since 1978 in BARUT 179 persons have been bitten by dogs, causing 5 deaths. Upon examination eight specimens proved to be positive for rabies. Since 1979 in BARSEL 99 persons were bitten by dogs, causing 3 deaths. Two specimens proved positive for rabies. In the BARTIM area 132 persons were bitten by There were no deaths because the cases were handled rapidly. specimens proved positive for rabies. In 1982 in MURA, Masupa Ria and Kayu Bulan there were 17 victims of dog bites with 2 deaths. Specimens from this area are still being examined in the Bandung laboratory. In the same year in the rabies-stricken area ranging from Gunung Mas (Kapuas Hulu) to the Katingan area (Kasunongan), there were eight victims with one death. Examination of specimens is continuing. Mass vaccination of dogs, cats, and monkeys is undertaken routinely to control the disease in areas where rabies is In Palangka Raya Municipality alone, some 20 dogs, cats and monkeys have been vaccinated at this time. /Excerpts/ /Jakarta MERDEKA in Indonesian 12 Mar 83 p 4/ 6804

RABIES IN BOGOR MUNICIPALITY—In Bogor Municipality 935 dogs, 8 cats and 2 monkeys have been given rabies vaccinations to prevent the spread of rabies in the city. When contacted by HARIAN UMUM AB on Monday /7 March/ in his office on Pemuda Street in Bogor, Veterinarian Asrul Makmur, chief of the Bogor Municipal Animal Husbandry Service, said the vaccinations will be continued until April. A member of the West Java Animal Husbandry Service staff contacted by HARIAN UMUM AB at the Bogor Municipal Animal Husbandry Office said rabies was on the increase in West Java at this time. In 1981-82 there were 136 dogs who proved to be positive for rabies. In 1982-83 there were 149, a significant rise for the Bandung municipal and regency areas, Ciamis Regency, Bogor Municipality and Karawang Regency. Responding to a question about the spread of rabies in Bogor Municipality since 18 January, he said this caused quite an uproar among the people of West Java since Bogor has been free of rabies for 13 years. According to data compiled by the West Java Animal

Husbandry Service, there have been 35 cases of rabies in West Java, most of which occurred in Ciamis Regency. There were 29 cases in Ciamis Regency in 1982. Therefore the Ciamis Regency regional government has undertaken the control of rabid dogs. To date it has killed 1,000 dogs including 249 that were proved to have rabies. Poisoning of these dogs continues. It is believed that about 1,000 /more/ dogs will be killed in Ciamis Regency to keep rabies from spreading in the area. /Excerpts/ /Jakarta HARIAN UMUM AB in Indonesian 9 Mar 83 p 2/ 6804

INFLUENZA IN JAYAWIJAYA-From late February to early March 35 persons died of influenza in Kutdal Village, Oksibil Subdistrict, Jayawijaya (located near the Irian Jaya border with Papua New Guinea), Benny Manuputty, Oksibil Subdistrict Head, told SINAR HARAPAN on Tuesday /8 March. A health team sent by the Oksibil Public Health Center is currently investigating the disease and taking control measures in this village. It is a 10-day round trip on foot. The health team reported that the deaths were not caused by an epidemic. People died because communication with the area is difficult and

they could not be given speedy assistance. The subdistrict head said that Oksibil Subdistrict has a population of only 9,000 and has no permanent public health center doctor. The only doctor available is one who flies in from Wamena every 2 months.  $\sqrt{\text{Exceprt}}/\sqrt{\text{Jakarta SINAR HARAPAN}}$  in Indonesian 8 Mar 83 p  $1/\sqrt{1000}$ 

DENGUE IN EAST KOTAWARINGIN REGENCY—Some time ago Sampit City in East Kotawaringin (KOTIM) Regency, Central Kalimantan, was attacked by an epidemic of dengue fever. To date 5 persons have died and 23 others are still being treated at the Sampit General Hospital. Meanwhile, 12,000 houses are being sprayed by a dengue fever control team. The houses will be sprayed again next month. Last week some 5,000 people, students, workers, and ABRI /Indonesian Armed Forces/ personnel, collectively cleaned up the areas around homes in Sampit City. /Exceprts/ /Jakarta MERDEKA in Indonesian 5 Mar 83 p 4/ 6804

UNIDENTIFIED DISEASE IN AGIMUGA--Thirty-seven persons in Amursel Village, Agimuga Subdistrict, Fak-Fak Regency, Irian Jaya, were reported to have died of an unidentified disease which is spreading throughout the area. was confirmed by a MERDEKA source in the Irian Jaya Regional Health Office although no information was obtained on the cause of this disease. consisting of a doctor and paramedics was sent from Jayapura to the disaster area to offer assistance and determine what type of disease this is. Provisionally it is believed that the disease erupted because of the long drought which struck the subdistrict in which the Amungme tribe resides. This was based on experience with a similar disaster that struck the Jayawijaya mountainous area to the north of Agimuga at the end of Frebruary. Some 300 persons in that area died because of the long dry season. The unidentified disease spread suddenly, moreover, the victims could not do anything for it. Information was obtained that the disease started with an infection in the respiratory tract. This was followed by a sudden rise in temperature at\_intervals for 2 to 3 days after which the victims succumbed to the disease. /Excerpt/ /Jakarta MERDEKA in Indonesian 12 Mar 83 pp 1, 3/ 6804

MALARIA IN KUALA KAMBAS--The eruption of malaria in Kuala Kambas, Central Lampung, has proved to be very serious. An investigation team sent to the site in early February by the P3M (Prevention and Control of Contagious Diseases) Directorate General found that 50 percent of the residents of that fishing village suffered from malaria parasites. From late November to late January 118 residents of Kuala Kambas died from what is believed to be malaria. was confirmed on Thursday /3 March/ by Dr M. Adhyatma, P3M director general. However, according to information gathered by KOMPAS at the site, 152 residents died of malaria and 24 others are critically ill. "Malaria is endemic to that region. Many Anopheles sundaicus mosquitoes are found there. These are insects that have a great potential for spreading malaria," Adhyatma said. The investigation team consisted of Ida Bagus Windya, an experienced malaria specialist, and Pranoto, an expert on mosquitoes. examined 469 of the 1,600 residents of Kuala Kambas. Of the 532 areas examined, 213 were proved to contain the tropical malaria parasite, Plasmodium falciparum. "Clearly, this was contrary to what P3M expected. The team's

investigation showed that health officials of that area are not sufficiently alert regarding epidemiology," Adhyatma said. The P3M team reported that the number of malaria cases in Kuala Kambas has been increasing since mid-1982. The first death occurred on 25 November. As of mid-December 30 persons had died. The chief of the Kuala Kambas tribe reported this to the Labuhan Meringgai Subdistrict head. "Up to the end of December the subdistrict health team just paid some visits and made general checks on the situation. Malaria medication was provided only in January," Adhyatma said. /Excerpt//Jakarta KOMPAS in Indonesian 5 Mar 83 pp 1, 9/ 6804

#### AIDS DIAGNOSED INCREASING IN ISRAEL

## Jerusalem THE JERUSALEM POST in English 10 Apr 83 p 1

[Text] TEL'AVIV.—The deadly disease known as AIDS has established a bridgehead in Israel, according to Prof. Dan Michaeli, head of Ichilov. Hospital.

"We have definitely diagnosed five cases, and we expect that there are others," he said on Friday.

AIDS—the abbreviation for Acquired Immune Deficiency, Syndrome—was only recognized in 1979 as a separate entity in the U.S. (and the world). Since then it has proved fatal to several hundred Americans. The disease destroys the body's immune system, leaving its victims prey to a variety of viruses and bacteria.

Michaeli stressed that "we do not know what causes the destruction of the immune system, and we have not discovered any way to effectively combat, or to prevent the disease." He was addressing a closed meeting of physicians taking advanced training courses arranged by Dr. Yitzhak Ser on behalf of the Israel Medical Association.

In the second half of 1982, there were 464 cases diagnosed in the U.S., and of these 362 have died. In 1983, 161 cases were diagnosed in the U.S. and of these, 141 have died. Of the few cases discovered in the U.S. in 1979, all died.

Michaeli, who said his statistics were taken from *Time* magazine, pointed out that 72 per cent of all cases pertained to homosexual men (plus a minute percentage of lesbian

women) with another 17 per cent of the persons afflicted being intravenous drug users.

Other patients did not fit into any pattern, although some did suffer from hemophilia. The physicians have no idea why these specific categories get the disease, Michaeli said.

Since those with AIDS cannot fight infections, they die of infections, with Kaposi's sarcoma, (the so-called "gay" cancer) being the greatest killer, and a specific type of pneumonia, called pneumocystis carinii being the second greatest killer.

Although the five known cases in Israel do not seem much, Michaeli noted it was considerable compared to American figures. For example, since the U.S. is about 60 times larger, the rate in Israel is only slightly smaller. Moreover, there are indications that the disease is on the increase in Israel, and he called upon physicians to pay special attention in trying to diagnose it.

Michaeli was purposely vague about the five cases — although he did say one person had died. This person had been flown here because a method of stimulating the immune response is being developed in Israel. After the diagnosis was confirmed, treatment was begun, but the patient died.

Michaeli did not mention if any of the Israeli patients were homosexuals, but he did say that the report of 200,000 homosexuals in Israel seemed "quite exaggerated."

#### BRIEFS

MALARIA EPIDEMIC—Forty-five people died of malaria in various parts of Narok district in February this year, according to the area district health education officer Mr (Karario). In his report, Mr (Karario) said the malaria surveillance team covered Osupuko and Kilgoris divisions following reports that an unknown number of people had died in the Manyattas from the disease. He observed that follow-up teams found the disease declining, but fears were being expressed that with the return of heavy rains an epidemic may recur. Mr (Kirario) said that adequate drugs had nevertheless been stocked in all the health institutions and the communities had been advised to report for treatment and to observe preventive measures. [Text] [EA250233 Nairobi Domestic Service in English 1400 GMT 22 Apr 83]

CHOLERA COOPERATION WITH UGANDA--Kenyan and Ugandan health officers have jointly vowed to fight to eradicate the cholera epidemic that has broken out in the town of Busia. The resolution was reached during a bilateral meeting chaired by the Kenyan district officer in Busia, Mr Joseph (Obunga). ing after the meeting, the Busia district public health officer, Mr (Samuel Nyapiosi), pointed out that the disease had so far claimed two lives, and 19 (nineteen) people had been admitted to the hospital from Uganda. He said that the meeting had agreed that health education is important in the exercise and called upon Wananchi of the two countries to maintain high standards of health in order to control the disease. The meeting appealed to landlords in the town to ensure that latrines and clean water were made available to their tenants. The meeting also agreed to ban funeral and other social ceremonies, as well as monitoring the movement of people along the common border. Meanwhile, Mr (Nyapiosi) has disclosed that the cholera that broke out in Busia town had also spread to other parts of the district. He called on the residents of the district to report to any nearest health centre any time symptoms of the disease were discovered. [Text] [LD020429 Nairobi Domestic Service in English 1600 GMT 30 Apr 83 LD]

## CHOLERA REPORTED IN EAST, WEST MALAYSIA

Many Cases in Sabah

Kuala Belait BORNEO BULLETIN in English 26 Mar 83 pp 1, 2

[Excerpt]

KOTA KINABALU.— Cholera is fighting back on Sabah's drought-hit East Coast despite claims that the situation there is back to normal after the recent outbreak early this month.
Two people died from

the disease last week one in Tawau and the other in Semporna while a huge 119 new cases were reported from Lahad Datu centre of the earlier epidemic. Forty four cases each were confirmed in Tawan and Semporna while Sandakan chalked up six, Kunak five and Kinabatangan and Keningau one each.

The deaths were those of a 14-year-old boy who died at his home at Mile 12 (Kilometre 19) Apas Road in Tawau while a 60-year-old Semporna man died a few hours

district hospital there. the state's total to eight the for the year, six of them. this month, while the still dangerous.

number of cholera cases Kota Kinabalu, which

stands at 470. Two formerly contaminated rivers — Sungai Tass and Sungai Ka- was declared labakan in Tawau - free.

after admission to the have been declared sale, but the Sungai Bendera Their deaths brought Estate in Sandakan and se state's total to eight the Tawau River at Kampung Ice-Box are

has not experienced any water problems during the current drought, was declared cholera-

#### Kelantan Declared Infected Area

Kuala Lumpur NEW STRAITS TIMES in English 24 Mar 83 p 1

[Text]

KOTA BAHARU, Wed. -Kelantan has been declared cholera: following an increase in the number of cases reported since the outbreak of the disease on Feb. 24.

The situation is, however, under control, said Acting State Health and Medical Director Dr Gurbakh Singh today.

The disease has claimed two victims so far — a pregnant 27-year-old woman from Kampung Bagus, Ran-tau Panjang who died at

the General Hospital here on March 4, and a 17-year-old youth from Kampung Tok Dokang near Pantai Cinta Berahi (Beach of Passionate Love) who died in hospital today.

He was warded yesterdav.

Dr Gurbakh Singh told Berita Harian that 15 cases had been confirmed so far while 17 cases were classified as carriers. Twelve others were suspected cases.

The cases were from Tumpat, Pasir Mas, Kota Baharu, Tanah Merah

and Kuala Kerai/Hulu Kelantan.

Dr Gurbakh Singh said 16 people were being treated at the Kota Baharu General Hospital and the Kuala Kerai district hospital.

Four of them had been confirmed cholera cases, eight carriers and the rest suspected cases.

He said the number of cases in the various districts had increased.

The State Government and the Health Ministry are being kept informed of the developments.

#### **BRIEFS**

BABY CONTRACTS MENINGITIS--A boy, aged two months, with meningitis was admitted to Christchurch Hospital last week--the first case of the infectious disease reported in the city for several months. The meningitis was caused by a bacterial infection, not by hot pools, and the Health Department was told of the case last week. It was one of 17 notifiable diseases reported during the week. Hepatitis is continuing to occur in the city. Three cases were reported last week, bringing the total so far this year to 26--three or four times more than for the corresponding period last year. The Health Department is concerned about the number of cases of hepatitis being reported, and has warned people to be more careful about hygiene. Hepatitis is becoming a minor epidemic in Christchurch this year, and the infection rate is likely to continue for some months yet, according to the department. Epidemics of hepatitis usually occur every few years, when people who had not developed an immunity catch it. Other infectious diseases reported to the department last week included four cases of campylobacter, one case of salmonella, seven cases of food poisoning, and one case of bacillary dysentery. [Christchurch THE PRESS in English 15 Mar 83 p 6]

NIGERIA

## BRIEFS

NO ONCHOCERCIASIS IN ABUJA--Abuja has been declared free of river blindness by the World Health Organisation, WHO. The organisation's deputy director-general, Dr. Adeoye Lambo, said WHO "has approved that the area was now habitable and whatever problems left should be seen by anybody as obtainable in any other area of the world". Abuja was declared infested by river blindness in 1975 after which WHO and the Federal Government co-operated in its rehabilitation. [Text] [London WEST AFRICA in English No 3426, 11 Apr 83 p 918]

#### IMMIGRANTS FROM ASIA BRING RETURN OF LEPROSY

Oslo DAGBLADET in Norwegian 19 Mar 83 p 10

[Article by Liv Jorgensen: "Leprosy in Norway"]

[Text] Boat people from Vietnam and immigrants from India and Indonesia, among other places, have brought leprosy with them to Norway. At least one such case is now being treated at Ulleval Hospital. Since 1970 the hospital has treated a handful of leprosy cases.

The contagious disease, which was discovered by Norwegian Armauer Hansen in 1873, was wiped out in Norway long ago. But in underdeveloped countries there are millions of lepers. The disease largely depends on poor social and economic conditions.

"The cases we have had here do not represent a danger for the population," emphasized Medical Director Ivar Helle at the infectious section of Ulleval Hospital to DAGBLADET. "It is easy to cure, if the money is available."

#### Isolation

"Those who have the disease are isolated for several weeks. It takes just a short time to cure them of the danger of infection. But to avoid recurrence the patients must be treated over a long period of time," said Dr Helle.

Leprosy is treated with medicines. These are expensive. For a welfare state such as Norway, therefore, the illness is no problem. In underdeveloped countries, however, it is something else.

The last case admitted to Ulleval was known before the patient arrived. Other hospitals have also had leprous patients.

"Control is now good," said Ivar Helle. "For example, the boat people do not come directly here from a ship. They are in camps, where they have a physical screening."

He said that some of the lepers turn themselves in for treatment. And health control for immigrants is now so extensive that the cases are discovered very quickly.

### All of Europe

According to the newspaper DAGEN there is leprosy all over Europe. Countries such as England and Netherlands have for several years been receiving such patients from their former colonies.

In both Sweden and Denmark there have been cases of leprosy among immigrants. Scientist Tore Godal at the Radium Hospital in Oslo believes that there is no reason to be more restrictive with immigration because of these cases.

The medicine Dapsone has long been used against the leprosy bacillus. Now many strains have developed resistance against this medicine, so other means are required. According to Tore Godal, these are expensive.

#### Infection

"Leprosy is an infectious disease, related to tuberculosis," he told DAGBLADET.

"But the bacillus travels freely through the skin and the nerves, while the tuberculosis bacillus settles in the lungs."

In 1860 there were 60 cases of leprosy in Norway. Around 1920 there were 150. The disease was eliminated in this country after the war.

9287

MEASURES TO IMPROVE HEALTH, EPIDEMIC PREVENTION WORK NOTED

Beijing JIANKANG BAO in Chinese 3 Mar 83 p 2

[Text] The Public Health Department of Xizang Autonomous Region adopted measures to carry out health and epidemic prevention work in a big way and obtained obvious results. Compared with the conditions in 1979, the region now has an additional 33 epidemic inspection and prevention stations, 103 epidemic prevention officials, and 49 physicians.

In recent years, 47 special training courses of various types to train public health and epidemic prevention officials were organized in the autonomous region and more than 970 persons underwent training. An additional group of 140 plus persons were sent to other areas for training. Many of those reached the intermediate grade of competence [after attending the courses]. In view of the condition of epidemics, the various epidemic prevention departments of the entire region adopted positive measures to carry out planned inoculation; 1.22 million persons were examined for the 6 endemic diseases of leprosy, tuberculosis, etc.; 410,000 doses of brucellosis vaccines, Bacillus Calmette-Guerin vaccines, and other biological products were administered. In areas of endemic goiter, iodine oil capsules and iodized salt were also given. Three special teams were established in the region to investigate the sources of the historically more damaging diseases in Xizang and 50 epidemic points in 8 counties of Xizang were identified. In scientific research, the teams proceeded with diagnostic studies of hepatitis, brucellosis, Keshan disease, diphtheria, and spirochetosis and understood the principle of occurrence of these diseases. They also carried out surveys of pathogenetic types of dysentery, the distribution of strains of epidemic encephalitis, grain aflatoxin, pneumoconiosis, and lead poisoning. They were awarded prizes for their items of environmental health surveillance and scientific research and commended for their sampling survey of tuberculosis.

At present, patriotic public health movement committees have been gradually established in the various areas of Xizang to show motion pictures of health science and technology, to print health propaganda drawings, to organize masses to carry out health projects and to change unsanitary traditions and habits.

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#### MASSES WORK TO IMPROVE SANITATION IN HEILONGJIANG

Beijing JIANKANG BAO in Chinese 3 Mar 83 p 2

[Article by Yu Haiyuan [0060 3189 3293]]

[Text] In order to accelerate the work of disease prevention and water supply reconstruction, Heilongjiang Province mobilized the masses to participate in the water supply reconstruction activities. Nearly 900 places have newly constructed tap water supplies to provide tap water to 500,000-plus inhabitants of 130,000 households in areas water shortage with attendant diseases.

Heilongjiang had been a region of severe endemic disease in North China and there were comparatively more villages with water shortages. For the purpose of improving the sanitary condition of drinking water, the provincial government had allocated 5 million yuan every year in recent years to be used for disease prevention and water supply reconstruction.

Early last year, through survey and research, the provincial Department of Water Conservancy summarized the experiences of some local tap water construction schemes which were simple and easy and proposed that in the future, for all newly constructed water wells, "the principle of tap water structures being built with funds raised by commune-brigades and the masses, with aid from the state in constructing the source of the water supply" must be adhered to so that water pipes may be added to provide tap water. For those reconstructed water wells, pipes should also be gradually installed to realize water availability in the household. This ruling greatly inspired the masses in areas of disease and water shortage to reconstruct the water supply. The cadres and masses of these areas hurried to raise the capital, to purchase materials for pipes, and to compete for water supply reconstruction indices and for tap water construction. For the purpose of promoting this peoplebenefiting work, many prefectures allocated funds from money raised from respective localities to provide aid. Songhuajiang Prefecture raised 100,000 yuan to help water supply reconstruction projects of poor brigades in areas of diseases. The red bricks needed by Anda, Zhaodong, Hulan, etc., counties to construct the building of water wells were supplied by commune brick plants. According to statistics, last year, a total of 14 million yuan were invested in the province for disease prevention water supply reconstruction, making that the year of the largest capital investment among recent years.

Of this amount, 900,000-plus yuan were raised by the local areas and the masses, amounting to 62 percent of the total investment. By the end of November, the plan of building 300 water wells in the province was completed; while there also were 897 structures of newly constructed or added on to pressurized tank tap water supply; more than 3 times the number of tap water structures completed before 1981. The masses in areas of endemic disease are supplied with low fluorine tap water meeting the drinking water standard. Symptoms of endemic diseases have generally been alleviated and the number of people migrating out of these areas have also been greatly reduced. The agricultural labor force is thus protected and production development speeded up.

6248

## SURVEILLANCE OF DISEASES IN TIANJIN REPORTED

Beijing ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY] in Chinese No 1, 1983 pp 21-25

[Article by Tianjin Municipality Public Health and Epidemiology Station; et al.: "Report on a Long-term Surveillance of Diseases in Tianjin in 1981"]

[Summary] Since 1979, five disease-surveillance points have been set up in the urban and rural areas of Tianjin, covering a population of 200,000. In these surveillance points, six kinds of register books were put into use for births and deaths, notifiable communicable diseases and outbreaks of diseases as well as immunization and untoward reactions following immunization. The data thus collected were analyzed annually.

In 1980, 1444 cases of communicable diseases were reported and diagnosed, with 23 percent of them being atypical cases. Dysentery and measles had the highest mortality rates. The proportion of reportable communicable diseases in recent years decreased in children, being 35.1 percent and 20.3 percent for the 0-14 age group in the urban and rural areas respectively. The crude death rate was 6.65 per thousandth in the urban area and 4.66 per thousandth in rural areas. The majority of deaths was from diseases of the circulatory system, the mortality rates of which were 386.69 per 100,000 in the urban area and 254.12 per 100,000 in the rural area. The second leading cause of death was cancer, the mortality rates of which were 134.89 per 100,000 in the urban area and 73.30 per 100,000 in the rural area. Death caused by infectious diseases ranked sixth in the mortality list, being less than 15 per 100,000 in both areas.

9717

cso: 5400/4131

#### MALARIA ANALYSIS IN SHANGHAI REPORTED

Beijing ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY] in Chinese No 1, 1983 pp 29-31

[Article by Lu Yong [7120 6102], Shanghai Municipality Public Health and Epidemiology Station: "Epidemiological Analysis of Malaria During the Last 30 Years in Shanghai"]

[Summary] Malaria was inherent in Shanghai before liberation (1949). It was characterized by multiple types and high incidence of infection, reaching a rate of 32 percent among urban inhabitants and 28 percent in the patients of outpatient departments of the hospitals in Shanghai. There were two outbreaks in the 1950's and 1960's. The incidence of malaria in the 1960's. was 3231.2 per 100,000 people. As a result of devoting major efforts to the prevention and cure of the disease, malaria has no longer been prevalent during the past 15 years. The rate of incidence dropped to below 5 per 10,000 people for the 7 years preceding 1981. The author found that 84 percent of the cases occurred in people who immigrated to the city following an investigation of 1,266 malaria patients in 1979. According to the following criteria, i.e., the incidence rate of malaria below 5/10,000 is an indication of near eradication and 10/10,000 is the critical line between epidemic and non-epidemic proportions in the case of malaria, the author proposes a rough line classifying the 30 years' history of malaria in Shanghai into two periods: the 15 years from 1952-1966 was an epidemic period and the following 15 years (1967-1981) was a non-epidemic period. The peak of the epidemic curve of malaria appeared to rise quickly during a period of 1-2 years and declined slowly during a 3-4 year period. Despite the fact that in 1979 many students returned from rural areas to Shanghai carrying malarial infection, outbreaks of the disease did not occur due to the timely adoption of adequate measures against malaria. In 1981, the incidence rate of malaria dropped to 1.1/10,000, indicating that the occurrence of this disease in Shanghai was essentially in the "clearing" or terminal stage. The author's experiences were: It seemed essential to exterminate mosquitoes repeatedly and to apply regularly "two radical" treatments, i.e., curing malaria patients and treating adequately those carrying malarial parasites, the systematization of combined surveillance and prevention of malaria in the neighboring provinces, active elimination of residual foci of the infection and thoroughly eliminating the habitats of mosquitoes. In this way, it is considered possible to stamp out malaria.

9717

HEALTH, EPIDEMIC PREVENTION WORK STRENGTHENED

Beijing JIANKANG BAO in Chinese 23 Jan 83 p 2

[Article by Zhang Qin [1728 0530] director, Guangdong Provincial Department of Public Health]

[Text] Since the Third Plenary Session of the 11th Party Central Committee, we have conscientiously implemented the policy of emphasizing prevention to accomplish much in this area and have obtained rather obvious results. In the province, filariasis has been basically eliminted from 30 cities and counties; the incidence of malaria has been reduced to below 5/10,000 in 93 cities and counties; 60 million preventive inoculations have actually been performed every year; incidence of such diseases as diphtheria, poliomyelitis, encephalitis B, measles, and pertussis has decreased on a large scale. Water improvement work has reached a new high, especially in rural villages. In the 2 years of 1980-81, drinking water engineering work was completed for 3 million inhabitants. Of this work, 80 percent was for tap water construction (3 ponds and 1 water tower per unit, with a brigade as the unit.) This was the equivalent of the total rural water improvement work of the 30 previous In 1982, clean and sanitary water was made available for an additional 2 million inhabitants. The public health phenomenon in the rural villages changed a great deal, and the number of illnesses decreased correspondingly. These accomplishments reinforced our understanding concerning the strategic policy of emphasizing prevention as a basic guiding idea of public health work, and were also an indispensable aspect of constructing socialist spiritual civilization.

Our understanding is that the attention and support of the leaders of public health administrative departments of all ranks form the key to performing good public health and epidemic prevention work. In these 2-plus years, the provincial Department of Public Health organized four advanced study classes for directors of public health bureaus on the county level and above, and two advanced study classes for directors of epidemic prevention stations of the country level and above. In each advanced study class, we emphasized the policy of concentrating on prevention, so as to unify the understanding of all. We also cultivated positive typical models to lead the way. Activities such as having "all cities learn from Fushan, all towns learn from Shuidong, and all villages learn from Xiaohong" have been launched extensively for many

years. In July of last year, the province's first secretary, Ren Zhongyi [0117 0112 1138] personally visited the public health model town, Shuidong Township. He hoped that every city of Guangdong would try very hard to eliminate the three pests and bring about the emergence of many more Shuidong Township-like public health cities and towns to give the patriotic public health movement of the entire province a big push forward.

I feel in order to implement the policy of emphasizing prevention, the work must start with the leader, with me. For this reason, the party group of the Department of Public Health has placed public health and epidemic prevention work in an important place. There must be a plan in the beginning of the year, inspection in the middle of the year, and summarization in the end of the year. I, myself, perform epidemic prevention work and there is also a deputy director helping me. Wherever there is a problem or wherever there is a good experience, we go there to take a look personally so that the problem may be discovered quickly and advanced experience may be summarized and extended. As much as possible we want to provide guidance face to face.

Last year, I spent more than 160 days at the grass-root units, mainly to study and understand rural public health work, especially epidemic prevention work. From the middle of June to the middle of August, I went to 28 counties (cities) in 7 prefectures (cities) primarily to carry out surveys, and research and examine the state of disease prevention, disease treatment, and water improvement work. With respect to problems seriously affecting disease prevention and disease treatment work in rural villages, I presented ideas of rectification that are, as much as possible, suitable for rural villages.

In 1979, we analyzed the budgets of leaders and technical teams of the entire public health organization and discovered a serious disproportion between the public health and epidemic prevention sector, which included health protection of women and children, prevention and treatment of chronic diseases, industrial health, etc., and the medical treatment sector. Without a timely readjustment, the implementation of the policy of emphasizing prevention would necessarily be affected.

In order to readjust the relationship between medicine and prevention and strengthen public health and epidemic prevention work, we selected some [graduates] of special public health and epidemic prevention middle schools and colleges and brought them into leadership staffs at various levels. In job classification, it is clearly stated in the regulation that the grades in epidemic prevention work are identical to those of hospitals. In job arrangements, epidemic prevention agencies were given preference to strengthen their teams. In the process of establishing one-third of the counties, as key counties from the very beginning, we stressed the construction of good hospitals and epidemic prevention stations in every one of these counties and they were given considerations in the coordination of the budget. to strengthen technical training, public health departments were established in medical colleges. In some public health schools, a public health physician specialty was established for the urgent training of public health technicians. For existing public health technicians, advanced training classes, short training courses, and personal training [apprenticeship] systems were instituted to improve their skills.

In cities and towns we paid attention to having good hospitals, street public health centers, and epidemic prevention projects in factories and other businesses, forming a three-layered medical treatment and public health network. In the rural areas, the county depends mainly on the epidemic prevention stations and hospitals to preform the public health and epidemic prevention work; the commune depends upon the public health centers, the brigade depends upon the barefoot doctors of the brigade public health stations. With these, a three-layered medical treatment and public health network was established in the rural villages. In recent years, we have stressed having an adequate number of persons in the public health center participating in the work of epidemic prevention and health protection work and we have demanded that they represent about 15-20 percent of the total employees of the public health center. When they go to do epidemic prevention work, they must carry a medicinal case on their backs which must contain a stethoscope so as to realize gradually, the combination of prevention and treatment. With respect to consolidating brigade public health stations, we stressed that there should be physicians, drugs, preventive measures, treatment measures, organization, and management.

In terms of public health and disease prevention, we proposed three-management and three-extermination; that is to say managing the water, the excrements, and sanitary foods and drinks, and exterminating mosquitoes, flies, and rats.

With respect to prevention of acute enteric infectious diseases, we proposed that preventive inoculations are to be administered to persons in small key areas. The expenditure thus saved should be used to supplement the expense of reconstructing the rural water supply. Using reconstruction of water supply as the basic measure to reinforce the work of preventing enteric infectious diseases. We will struggle to resolve, basically, the problem of supplying sanitary water to the 8 million inhabitants of the coastal region where dysentery is a problem and the region of high fluorine and water deficiency. Public health propaganda and education are also a basic strategic measure of disease prevention work. In the past, we did not do enough of this. Now, we have begun to be conscious of its importance. This year we prepare to strengthen the work in these areas.

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GUANGXI PROVINCE IMPROVES SANITATION, REDUCES DISEASE

Beijing JIANKANG BAO in Chinese 10 Mar 83 p 2

[Article by Huang Caigang [7806 2088 0474]]

[Text] Taoxu Commune, Heng County, Guangxi Province primarily used the money of the collective body as capital with some aid from the state in contructing wells and water towers so that 85.5 percent of the commune's inhabitants have tap water and well water. The water shortage in the desert-like dry land of Taoxu which had caused the turbid pond water to be as valuable as oil has now begun to change.

Taoxu was originally an area of schistosomiasis epidemics. In the past the majority of the villagers used unclean stream and pond water for drinking. In late autumn and early winter, every year, the fish ponds became dry and the inhabitants had to get up before dawn to travel serveral li to wait in line for water. In 1975, the commune party committee was concerned about the hardship and disease of the masses and proposed the principle of depending upon the energy of the masses to resolve their own drinking water supply problem. With respect to raising the needed capital, [the committee] insisted on getting some from the collectives, some from the masses, and some supplementary funds from the state. After going through 7 winter-spring periods, 206 machine-drilled wells, pressure pump wells, sand-filtered wells, and spring wells were constructed, in addition to 21 water towers and ponds, and water pipes for 10 brigades to supply tap water to 24,000-plus inhabitants and clean well water to 26,000-plus others. In the process of reconstructing the water supply, the commune invested 450,000-plus yuan, of which 88 percent were raised by the collectives and individual members of the production teams. The completion of this group of water towers and wells not only resolved the shortage of drinking water problem for men and animals, but also the problem of irrigating 3.740-plus mu of farmland. Meanwhile, the level of health of the masses has been improved, compared with that of 1974. The incidence of dysentery of the entire commune has decreased by 90.8 percent. The masses are delighted, singing: "No worry about drinking water now; A twist of the faucet makes the water flow out in a straight stream; Grains are abudnant, men smiling, flocks of geese and ducks playing all over the ponds."

6248

# EARLY HEPATITIS B VIRAL INFECTIONS COMPARED

Beijing ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY] in Chinese No 1, 1983 pp 37-42

[Article by Gu Binchang [7357 1755 2490] and Wu Yongjian [0702 3057 0256], both of the Shanghai Municipality Medical Laboratory; Gao Runie [7559 3067 5119] and Wang Xueli [3769 1331 0632], both of the Shanghai Municipality Tumor Research Laboratory; et al.: "Comparison of the Presence or Absence of Early Hepatitis B Viral (HBV) Infections Among Population in Foci of Primary Hepatoma with Relatively High and Low Incidence Rates"]

[Summary] The paper reports different degrees of epidemic conditions of hepatitis B viral infections obtained by sampling natural populations in those foci with relatively high and low rates of incidence of primary hepatic cancer in Chongming County, Shanghai Municipality, where the disease was found to be prevalent. The results indicated that the rates of positive reaction of HBsAg presented no significant difference between sera of inhabitants from high and low foci of liver malignancy. In cases where anti-HBs in sera were examined, however, the rate of positive reaction of sera obtained from the inhabitants in the low foci was significantly higher than that obtained from the inhabitants in relatively high foci. Results also indicated that female inhabitants had a significantly higher rate than did male inhabitants. It was suggested that the immune level against HBV infection might be one of the important factors determining whether hepatoma would eventually develop into a malignant form following infection by HBV. In Chongming County, there was evidence suggesting contamination with aflatoxin together with early damage of the liver as a result of an HBV infection in childhood promoted an accelerated growth of hepatoma. The injury caused by aflatoxin might produce a deficient immune response of the body against HBV infections. Consequently, it might accelerate the integration of HBV genes into hepatic cells of the host, thus it might help explain why there existed a high morbidity rate of liver cancer and an earlier incidence of hepatic carcinoma occurring in Chongming County than elsewhere in the municipality.

9717

#### SURVEY OF RUBELLA IN BEIJING REPORTED

Beijing ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY] in Chinese No 1, 1983 pp 32-33

[Article by Lin Zhongmin [2651 0022 3787] and Yang Yongrong [2799 3057 2837], both of the Beijing Municipality Public Health and Epidemiology Station; et al.: "Seroepidemiological Survey of 959 Persons with Rubella in Beijing"]

[Summary] By means of a hemagglutination inhibition antibody (HAIA) test, the authors report the examination of sera for rubella of 959 normal persons from 4 months to 45 years of age in the urban and rural areas of Beijing up to the end of 1980. The results reveal that the percentage of positive titer of HAIA was 88.8 percent and its geometric mean was 43.95. An examination was made of 139 women of childbearing age and it was found that the positive rate was 99.28 percent and its geometric mean was 39.64. Among people over 3, a positive percentage was found over 85 percent. The results indicate that the tested inhabitants of Beijing possess a universal immunity to rubella.

9717

ANTIGEN FOR HEMORRHAGIC FEVER--For the first time in China, epidemic hemorrhagic fever antigen has been found in the lungs of large white mice, thus proving that large white mice can also be the source of infection of hemorrhagic fever. In December of last year, in cooperation with the Virus Research Office of Xian College of Medicine, Xian Municipal Epidemic Hemorrhagic Fever Research Office used the fluorescence method to succeed in finding the epidemic hemorrhagic fever antigen substance. This finding has been reexamined and proved to be true by the Research Institute of Epidemiology and Microbiology Chinese Academy of Medical Sciences. Epidemic hemorrhagic fever is an acute infectious disease with a high fatality rate. At present, among wild rats, Apodemus agrarius and Rattus norvegicus have been the proven sources of infection in China. [Text] [Beijing JIANKANG BAO in Chinese 10 Mar 83 p 1] 6248

# HOSPITAL REPORTS MEASLES CASES UP

# Manila BULLETIN TODAY in English 6 Apr 83 pp 1, 11

[Text]

A total of 232 persons, mostly children, were admitted last week at the San Lazaro Hospital (SLH) due to measles.

This brings to 839 the total number of patients afflicted with measles last March who were hospitalized at the SLH alone.

Latest report from the Disease Intelligence Center (DIC) of the Ministry of Health said that last week's number of measles cases exceeded the preceding week's 190 cases and the five-year median of 192.

Of the total, 222 cases were from Metro Manila, the rest from neighboring provinces and cities.

Increased cases of diarrhea, typhoid fever, chicken pox, and whooping cough last week were also reported by the DIC.

Meanwhile, Regional Health Director Hilarion Ramiro of Region 9 said that the outbreak of measles, malaria, and dysentery in Sibuco and Sirrawai, Zamboanga del Norte, is under control.

Ramiro wired the MOH central office that there were 18 deaths due to complication of measles as of March 2.

Cases of measles, malaria and dysentery reportedly appeared among Subanon families in the interior who later moved to the coastal areas with their sick family members and consequently contaminated many others in the coastal areas.

Most cases have reportedly been uncovered by special teams of the regional health office who are still in the affected areas instituting surveillance activities. Health services are instituting measle immunization in various areas.

Special clinics are also held in the areas and house-to-house visits are made looking for and treating cases, the report said. It added that preventive measures have been taken to stop the further spread of the disease.

## EPIDEMIC IN ZAMBOANGA DEL NORTE REPORTED

Manila BULLETIN TODAY in English 4 Apr 83 p 1

[Article by T. P. Rimando]

[Text]

DIPOLOG CITY, April 3 — At least 78 persons, most of them children, were feared dead in an outbreak of measles, dysentery, and malaria during the past two weeks in the farflung coastal municipalities of Sibuco and Sirawai, Zamboanga del Norte, it was reported here today.

Unconfirmed reports reaching this capital city said at least five sick children succumbed every day during the first few days of the epidemic.

The reports did not mention how the disease started. Names of the fatalities were not listed. They were reported buried as fast as they died.

An Army medical group from the 24th Infantry battalion under Lt. Col. Servando Lara was reported to have reached the disease-stricken town to check the spread of the epidemic.

epidemic.
Ministry of Health
Region 9 Director Hilarion Ramero Jr. dispatched a team of physi-

cians and nurses from the emergency hospital of the adjacent town of Siocon.

Sibuco and Sirawai, predominantly inhabited by Muslim fishermen and farmers, are the southernmost municipalities of Zamboanga del Norte. They are not connected with roads to the national highway. Local residents' only means of transportation is by night-long motor launch to Zamboanga city which is nearer than the capital city of Dipolog.

#### EPIDEMIOLOGY REPORT FOR 1982 PUBLISHED

Warsaw SLUZBA ZDROWIA in Polish 13 Mar 83 p 3

[Article by Dr.Hab.Ryszard Brzozowski, M.D., chief sanitary inspector: "Infectious Diseases in Poland in 1982"]

[Text] In presenting a report on the incidence of infectious diseases in 1982, I would like to begin by calling attention to certain essential elements of general evaluation. In 1982, a major growth has been registered in the number of cases of spinal meningitis, the incidence of viral hepatitis increased by 6 percent and that of whooping cough by 64 percent. In 1982, a decisive improvement has been achieved in epidemiology of measles; the number of cases of typhoid fever was the lowest on record in Poland; there was a further decline in the number of scabies patients. Compared with 1981, instances of roseola decreased 15 times.

In 1982 no cases of diphtheria were registered, while five occurrences of paratyphoid fever were observed (the smallest annual number on record). There were five cases of typhus fever (in 1981, 4 cases) and six cases of epidemic infantile paralysis (compared with one case in 1981).

Table 1 illustrates the prevalence of diseases in 1982 and 1981.

Table 1. Infectious Diseases in 1982 and 1981 (Preliminary Data)

	Number of case	es per year
<u>Disease entities</u>	1982	1981
Cholera	· _	1
Typhoid fever	79	98
Paratyphoid fever	5	13
Other salmonella diseases	10,724	10,816
(excluding food poisoning)		
Dysentery	1,337	2,868
Diarrhoea in children under 2 years	27,588	27,353
Diphtheria	-	1
Whopping cough	469	285
Scarlet fever	11,453	25,470
Tetanus	. 124	90

Table 1. [continued]

	Number of case	es per year
Disease entities	1982	<u>1981</u>
Epidemic infantile paralysis	6	1
Spinal meningitis	27,673	5,425
including meningococcal	395	408
other bacterial	2,816	2,450
enteroviral, serous		•
unspecified, lymphocytic	24,462	2,567
Chicken pox	<b>125,09</b> 2	100,622
Measles	7,668	35,302
Roseola	14,007	206,969
Meningitis	434	344
including arboviral	9	18
viral, unspecified	165	88
herpes and others	260	238
Viral hepatitis	50, 207	47,299
including HBsAG(+)	15,022	14,977
Epidemic parotitis	56,345	115,275
Typhus fever and other rickettsia	. 5	. 4
Trichinosis	307	316
Scabies	44,236	51,024
Influenza	587,479	178,508
Food poisoning	11,051	12,003
including botulism	739	619
salm nella	6,473	7,539
enterotoxic staphylococcal	609	516
unspecified and other	3,072	2,790
mushrooms	90	475
chemical	68	64
Poisoning with chemical compounds	13,287	10,553
including insecticides	205	167

# Typhoid Fever

In 1982, a total of 79 instances of typhoid fever were registered. This was the lowest annual number on record. During the course of the past few years, there was a certain reduction in the downward trend, which is seen from multiannual analysis presented in Table 2.

The highest prevalence in 1982 was registered in Ciechanow (1.22), Krosno (1.10), Kielce (1.02) and Ostroleka (0.80) provinces. In 24 provinces no cases of typhoid fever were registered.

Generally, the epidemiological situation with typhoid fever in Poland can be described as good. Table 3 shows the incidence of typhoid fever in a number of European nations. It suggests that the situation with typhoid fever epidemiology in Poland is relatively good.

Table 2. Incidence of Typhoid Fever

Year	Number of cases	100,000 residents
1970	419	1.3
1975	276	0.81
1976	181	0.53
1977	132	0.38
1978	94	0.27
1979	103	0.29
1980	80	0.22
1981	98	0.27
1982	79	0.22

During 1980-81, typhoid fever was the cause of four deaths.

Table 3. Typhoid Fever Prevalence in Several European Countries

Country		valence pe 00 populat	
Austria	0.29	(data of	1976)
Czechoslovakia	0.50	(date of	1976)
France	1.98	(data of	1975)
Greece	7.00	(data of	1975)
Yugoslavia	1.40	(data of	1982)
GDR	0.38	(data of	1981)
Rumania	0.40	(data of	1982)
Hungary	0.17	(data of	1981)
Finland	0.20	(data of	1982)

# Paratyphoid Fevers

In 1982, only five instances were registered, which was the lowest annual figure on record. The situation thus is improving. In 1970, 55 cases of paratyphoid fever were observed, while in 1975 the number was 28, and in 1980,10.

# Diarrhoea In Children Under Two

During the past few years, a certain decrease in the number of cases is observed, as illustrated by the following comparison on the next page.

Highest disease prevalence in 1982 was registered in the following provinces: Tarnobrzeg (560.1), Walbrzych (480.8), Wloclaw (465.6), Jelenia Gora (429.9) and Suwalkie (419.9)

Year	Cases	Index per 10,000 children
1975	32,953	272.3
1976	34,572	274.1
1977	36,994	283.7
1978	32,804	250.2
1979	37,209	283.0
1980	30,803	228.6
1981	27,353	201.4
1982	27,583	204.9

# Viral Hepatitis

In 1982, a 5 percent increase in viral hepatitis incidence was observed compared with 1981. However, during the past five years the situation was definitely improving. In 1978-82, more than 122,000 less cases of the disease were observed than during the 1973-77 five-year period. The national prevalence index in 1982 was 138.5.

The highest prevalence in 1982 was observed in the following provinces: Radom (336.6), Siedlee (271.8), Ciechanow (259.9), Lomza (256.5) and Wloclaw (244.8).

General prevalence of viral hepatitis in Poland compared with European nations was high.

# Measles

The epidemiological situation with measles in 1982 was most favorable, as illustrated by Table 4.

Table 4. Prevalence of Measles

Year	Number of instances	Prevalence index per 100,000 population
1970	125,572	382.8
1975	146,875	431.1
1976	125,188	364.3
1977	44,919	129.5
1978	84,697	240.1
1979	30,804	87.4
1980	24,882	64.9
1981	35,302	98.3
1982	7,668	21.1

These data indicate a considerable advance in eradication of measles. The epidemiological situation in Poland and other European nations indicates a considerably reduced prevalence in 1982 in the GDR and Bulgaria, while in Hungary, Yugoslavia and Finland the index was higher.

There was an increase of measles in the following provinces: Radom (771.9), Zamosc (122.9) and Gorzow (116.4).

# Whooping Cough

The epidemiological situation with whooping cough was favorable, despite an increase in prevalence in 1982. The following comparison gives stastics for 1973-82.

Year	Cases	Prevalence index per 100,000 population
1973	3,149	9.4
1974	2,675	7.9
1975	1,194	3.4
1976	526	1.5
1977	1,068	3.1
1978	635	1.8
1979	514	1.5
1980	282	0.65
1981	285	1.78
1982	469	1.27

Compared with other European countries, the situation with whooping cough in Poland can be described as favorable. This is illustrated by Table 5, which summarizes data for 1982.

Table 5. Prevalence of Whooping Cough in Several European Countries in 1982

Country	Prevalence per 100,000 population
Bulgaria	2.10
Finland	6.20
Yugoslavia	21.7
GDR	1.1
Rumania	<b>29.9</b> %
Hungary	0.50

# Epidemic Infantile Paralysis

During the past 10 years, a total of 124 cases were registered in Poland, including 17 cases in 1978-82, and 6 cases in 1982--specifically in provinces: Bydgoszcz, Walbrzych, Warszaw and Krakow.

The situation with polio myelitis in Poland is comparable to that observed in European countries.

#### Tetanus

During the past 10 years, annual figures were similar, as illustrated by Table 6.

Table 6. Prevalence of Tetanus

	Number of	Prevalence per
Year	cases	100,000 population
1973	121	0.36
1974	99	0.29
1975	111	0.33
1976	112	0.33
1977	115	0.33
1978	105	0.30
1979	104	0.30
1980	89	0.25
1981	90	0.25
1982	124	0.34

The highest incidence was registered in the following provinces: Tarnow (1.95) Nowy Sad (1.41), Przemysl (1.31), Krakow (1.10), Bielce (1.06) and Czestochow (1.06).

### Scabies

In the years 1978-82, a reduction of scabies was observed from 118,174 to 44,236 cases.

The national average in 1982 was 122.3; this index was considerably higher in the following provinces: Przemysl (251.1), Wloclaw (248.2), Chelm (237.6), Ciechanow (227.3), Bialystok (223.6), Olsztyn (261.9) and Lodz (213.2).

## Spinal Meningitis

In 1982, a notable increase of viral spinal meningitis was observed starting from July. Initially, the increase was registered in Wroclaw, followed by Torun Province. In December 1982, the epidemiological growth was seen in 29 provinces. Biological material from patients revealed the following enteroviri: Coxsackie ag, Coxsackie B<sub>1</sub>, B<sub>3</sub>, B<sub>4</sub>, ECHO<sub>4</sub>, 8,9. The national prevalence index was 67.4 per 100,000 residents. Highest figures were observed in the following provinces: Tarnow (236.5), Torun (197.0), Nowy Sad(187.3), Krakow (157.3) and Czestochow (130.3).

In the following provinces, the prevalence was many times lower than the national index: Pila (7.2), Leszczyn (8.5), Lomza (10.3), Gorzow (10.9), Slup\$(13.8), Poznan (16.9), Zamoşc(18.0), Radom (18.2) and Legnica (18.3). The data for 1982 can be described as preliminary and subject to minor adjustments.

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#### JUMBE ADDRESSES NATIONAL CHOLERA COMMITTEE

EA020503 Zanzibar Domestic Service in Swahili 1600 GMT 28 May 83

[Excerpt] Zanzibar—The National Cholera Committee has been called upon to draw up a concrete plan to ensure that the disease is completely eradicated in Zanzibar. The directive was issued today at State House by the president of Zanzibar, who is also the chairman of the revolutionary council, Ndugu Aboud Jumbe, when addressing the National Cholera Committee after receiving a special report on the cholera which broke out in the country at the end of March. Ndugu Jumbe said that all the laws enacted by the government on combating the disease must be observed to make the fight against it successful.

The laws include those applying to entry to and departure from the country so as to prevent frequent outbreaks of the disease on the islands. He said that although the government had issued permits to fishermen to fish outside the islands, it appeared that the fishermen did not adhere to those procedures and some of them left the country without permits. Ndugu Jumbe called on the organs concerned to ensure that the procedure was adhered to and action taken against violators.

Earlier, presenting its report on cholera to the chairman of the revolutionary council, Ndugu Aboud Jumbe, the National Cholera Committee said the disease had broken out in Zanzibar and Pemba towards the end of March and that the committee had taken various steps to combat it. These included imposing quarantine in some areas and districts affected by the disease and banning feasts and food sales in the locations. The committee had also decided to open treatment centers in affected areas.

The committee chairman, Dr Uledi, said that following investigations conducted by the committee, it had been established that the disease had been brought in by fishermen fishing in Bagamoyo, where the disease had broken out recently.

In its report, the committee also called on the government to vote special funds to combat the disease whenever it breaks out in the country.

The report adds that the disease has now declined in Pemba, but here in Zanzibar it continues to affect some areas in the southern, northern and urban regions.

ZANZIBAR CHOLERA REPORT--Zanzibar--A 24-hour cholera report issued by the community health department says four new patients were admitted for observation to the V. I. Lenin hospital. Seven patients under observation have recovered and have been discharged 13 patients remain under observation. The report adds that one child cholera patient at the V. I. Lenin hospital has recovered and has been discharged. There are now no confirmed cholera patients at the hospital. The report adds that in Zanzibar's northern region one new patient has been admitted for observation at Misufini; one patient remains under observation at Mahonda center and another at Donge center. The report also says three male cholera patients continue to receive treatment at Mkokotoni. At Upenja center three patients have been discharged and two female cholera patients remain. Three patients have been discharged at Chaani center and one child patient remains. There was no communication from Zanzibar's southern [Text] [EA020512 Zanzibar Domestic Service in Swahili 1600 GMT 28 region. Apr 831

CHOLERA IN ZANZIBAR—A statement on cholera issued by the community health department has said that one child affected by the disease has died at V.I. Lenin Hospital while another patient is continuing treatment. The statement said that in the southern region of Zanzibar, eight patients have been detained at the Jambiani health center, one of whom has died. Thirteen patients in all have been undergoing treatment. The statement indicates that the number of cholera cases on the islands of Zanzibar is still increasing. [Excerpts] [EA250230 Zanzibar Domestic Service in Swahili 1600 GMT 22 Apr 83 EA]

MORE CHOLERA CASES—Government authorities in the central district have suspended all public and private festivities in the district because of the cholera outbreak. Two cholera cases have been detained in V.I. Lenin Hospital, and another has died. There are now 13 patients at the Jambiani health center, and 1 patient has died at Nungwe center. [Text] [EA250230 Zanzibar Domestic Service in Swahili 1600 GMT 23 Apr 83 EA]

INFANT MORTALITY RATE—ZAMBIA'S infant morality rate is higher than other countries in East and Central African countries, a United Nations Children's Fund (UNICEF) expert said yesterday. Prof. Richard Jolly who is UNICEF deputy director said, in Zambia, about 750,000 cases of diarrhoea and measles were recorded every year and out of these, over 30,000 children die. Prof. Jolly said Zambia records 106 per cent of infant mortality every year with 20 per cent death rate, Tanzania has 103 per cent infant mortality rate with 19 per cent death rate. Kenya has 87 per cent infant mortality rate with 15 per cent death rate while Zimbabwe has 74 per cent infant mortality with 12 per cent death rate and Botswana has 86 per cent infant mortality rate. The child death rate was not given. Explaining the main causes of diarrhoea and measles amongst children, Prof. Jolly said this was due to lack of health education for mothers. The UNICEF deputy chief observed that most children who died of diarrhoea were those bottle fed because feeding methods were not strictly observed by parents. [Text] [Lusaka DAILY MAIL in English 1 Apr 83 p 1]

BORDER CHOLERA OUTBREAK DENIED--ZIANA reports that the government has deployed a team of medical personnel in all border areas throughout the country to fight a possible outbreak of cholera. The agency says the minister of health, Comrade Munyaradzi, made the announcement in reaction to reports of cholera deaths in the Chiredzi District near the Mozambique border. Comrade Munyaradzi is quoted as saying that there is no outbreak of cholera, except that people are just panicking. The minister, who flew to Chiredzi last week with a team of medical experts said it has been discovered that five Mozambicans who died in the area were not killed by cholera. [Text] [MB270637 Harare Domestic Service in English 0400 GMT 27 Apr 83]

FRENCH GIFT OF VACCINE—This Monday, March 7, 1983, at the Bujumbura airport, the minister of agriculture and cattle—raising, Mr Alexis Ntibakiranya, received a gift of 300,000 doses of vaccine against rinderpest offered by the French co-op mission. This request, minister Ntibakiranya stated, was forwarded to the French co-op following the appearance of rinderpest in Tanzania, where cattle frequently roam the Burundi borders, especially in Kumoso. This gift will make it possible to vaccinate the herds in Kirundo, Muyinga, Cankuzo, Ruyigi, Makamba and Rutana. The minister of agriculture and cattle—raising pointed out that other requests have been forwarded to Belgium and to the FAO, which will make it possible to vaccinate all the livestock in Burundi. [Text] [Bujumbura LE RENOUVEAU DU BURUNDI in French 8 Mar 83 p 4] 9895

EVROS RABIES EPIDEMIC--A rabies epidemic has affected the Evros region and hundreds of dogs and cats are suffering from the disease. This has greatly upset the Ministry of Agriculture, because sporadic cases have been noted in other nomes of the country, as well as in Athens. The Ministry has therefore addressed a circular to regional veterinary departments, asking them to start a preventive vaccination campaign in order to stop the spread of the disease. The extent of the epidemic is worrying the competent services in the Evros region, which have forbidden any movement of animals and have launched a general vaccination campaign. [Text] [Athens AKROPOLIS in Greek 17 Apr 83 p 1]

### FARMERS TOLD TO WATCH ECZEMA LEVEL

Auckland THE NEW ZEALAND HERALD in English 25 Mar 83 p 2

[Text]

# Warm, humid conditions are causing facial eczema spores to multiply again in many areas of South Auckland, Auckland and Northland.

Spore levels on pastures first started multiplying in some areas about 10 days ago, but a change of weather stopped their pro-

The Ministry of Agriculture and Fisheries says the spores have not yet multiplied to danger levels for livestock, but they were being checked throughout the region today, and will be again tomorrow.

Farmers are advised to start spore counting on their own farms, so as to be ready for danger periods with sprayed pasture or zinc dosing.

zinc dosing does become Hokianga. necessary, the correct dose levels are important.

from all ministry offices.

The Herald correspondent in Kaikohe reports that recent rains in the midnorth have veen a mixed blessing.

Black beetle is on the rampage causing severe pasture damage in some areas.

ministry field The officer, Mr J. D. Bryant, of Kaikohe, says the beetle is particularly bad in the Okaihau area, but there are

The ministry says that, if infestations in clay areas in

He said that the wet spring followed by the Details are available drought and then the recent rains had aided breeding.

· Chemical control was very expensive farmers already short of feed from the effects of the drought and cricket infestations were preferring to ride the problem out.

Mr Bryant said to be effective chemicals had to be used before the beetles had become evident, and rain was needed to wash the. chemicals into the ground.

5400/4405 CSO:

RINDERPEST OUTBREAK—About 20,000 heads of cattle have been killed in Bauchi State by rinderpest following an outbreak of the disease, the state commissioner for animal and forest resources has said. Alhaji Aliyu said that the ministry had set up 36 vaccination centres in the state to combat the disease but added that there were not enough vaccines and equipment to effectively check the disease. [Text] [London WEST AFRICA in English No 3424, 28 Mar 83 p 806]

#### LOCALITIES WORK TO ELIMINATE LIVESTOCK EPIDEMICS

Hanoi QUAN DOI NHAN DAN in Vietnamese 16 Mar 83 p 1

[Article: "Thanh Hoa, Nghia Binh Eradicate Many Livestock Epidemics"]

[Text] (VNA) Recently, the Thanh Hoa veterinary sector has detected and promptly confined and stamped out pockets of contagion of trypanosomiasis and bovine gangrene in 15 villages of Nong Cong District. Bovines affected by trypanosomiasis and gangrene have been treated with appropriate drugs. In addition to supplies of veterinary drugs, the Thanh Hoa agricultural service has sent cadres into Nong Cong District to help local veterinarians treat sick animals.

At present, the bovine population in areas of contagion and in neighboring villages has been vaccinated, and stables have been cleaned up. Of over 2,000 sick animals, only 276 have died, and the remaining ones have been cured. Cooperative members are actively caring for these convalescing bovines.

Many cooperatives in Tu Nghia, Binh Son, and Tuy Phuoc Districts in Nghia Binh Province, have urged the people to contribute financially to setting up a veterinary medicine repository in each cooperative. Districts and cities in the province have also investigated how to once again maintain the number of bovines, and to use this data for signing contracts designed to distribute veterinary drugs and equipment promptly. Many cooperatives have paid veterinary cadres appropriate salaries to encourage them to work regularly and effectively.

In highland villages, the Nghia Binh veterinary sector has conducted elementary and advanced training for veterinary cadres, and has also supplied drugs to the people and guided them to use traditional herbal medicines to treat common animal diseases.

As of now, Nghia Binh Province has built and consolidated 15 district and city veterinary stations, and 265 district and subward animal husbandry and veterinary committees comprising 1,124 veterinary cadres.

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## INSECT INFESTATION OF SAO PAULO COTTON CROP SPREADING

# Additional Funding Needed

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 23 Mar 83 p 27

/Text/ In addition to the 450 million cruzeiros already released by Minister Amaury Stabile to begin spraying insecticide over the area infested by Anthonomus grandis, or "bicudo" /a type of boll weevil/, another 120 million will be necessary to eradicate the insects from the infested cotton plants. That was the conclusion reached yesterday by representatives of the Brazilian Agriculture and Livestock Research Enterprise (EMBRAPA), the Campinas Agronomic Institute (IAC), the Department of Coordination of Overall Technical Assistance (CATI) and the National Secretariat of Agriculture and Livestock Protection /SNDA/ of the Ministry of Agriculture.

EMBRAPA will publish a plan of action today giving the responsibility of each of those organizations in the combat against this pestilence which is considered to be the number one enemy of the cotton crop. At the meeting they also decided to abide by the suggestions of entomologist Sebastiao Barbosa, of EMBRAPA, to begin three applications of the insecticide, "Azimphos Etil," at intervals of 10 days over the 15,000 contaminated hectares.

In addition to this, Barbosa suggested that quarantine measures be established in the infested area prohibiting any cotton from being taken out in the form of kernels, seeds and industrial waste, with the mandatory destruction of crop waste by 15 April. Another measure to be adopted is a ban on planting cotton in the contaminated area in the 1983-1984 agricultural year with the establishment of two additional areas of control around the area where the pestilence was discovered.

In conjunction with those measures, the EMBRAPA entomologist suggested—and the experts who attended yesterday's meeting accepted—a field inspection to eliminate plants which are sprouting in the interim cotton period through the installation of traps in the contaminated and adjacent area, designed to destroy the "bicudo." According to information given by Jose de Alencar Nunes Moreira, head of the National Center for Cotton Research (CNPA), subordinate to EMBRAPA, the money to begin the combat operation against the "bicudo" is available, and the minister is only awaiting the plan of action—to be published today—to release the funds.

A representative of the Regional Air Transport Enterprise (VOTEC) also attended yesterday's discussions inasmuch as this is the only organization which has the necessary helicopters to spray insecticide over the 15,000 contaminated hectares. Orders have been given to combat the "bicudo" immediately, since it has great reproductive capacity (it spreads 320 km in 1 year from the place in which it first appeared).

## In Parana

Parana's cotton production is not being hurt by the presence of the "bicudo," but experts from the Rural Economy Department of the Secretariat of Agriculture estimate that excess rainfall has already caused a decline of 5 percent in the state's production.

# Pestilence Affecting 17 Cities

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 25 Mar 83 p 29

/Text/ Campinas--The cotton pestilence discovered in Sao Paulo this month is affecting at least 10 cities in addition to the 7 where the Ministry of Agriculture detected foci. This news was given out yesterday by sources from the State Secretariat of Agriculture, who stated emphatically that the 15,000 hectares mentioned by the ministry are only "an indication" of the extent of the pestilence, which is much greater.

Yesterday, the "bicudo" was discovered in Mogi-Guacu and Santa Barbara West, two cities where the Ministry of Agriculture officials thought the pestilence had not struck. The Office of Agriculture in Mogi-Guacu advised that the "bicudo" was discovered in one of the six properties visited as of yesterday morning, covering an area of 24 hectares. A worse situation developed in Santa Barbara West where, of the 700 hectares planted, 350 are undoubtedly infested by the pestilence. The presence of the "bicudo" was also discovered in other localities, according to CATI's partial survey. Yesterday the Central Agriculture and Livestock Cooperative of Campinas announced that it has received word from its associates that the insect has also been discovered in Sumare.

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## FUNGUS ATTACKS PARANA CORN FIELDS

#### Concern Over Corn Smut

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 1 Apr 83 p 20

/Text/ Londrina--A new disease known as "corn smut" may be threatening the future corn crops of Parana--Brazil's biggest producer with a crop of 5.8 million tons planted over an area of 2.3 million hectares--inasmuch as the disease, transmitted by a fungus which reduces the leaves, blossoms and ears of corn, is becoming more intense in the state's corn crops and Brazil does not have effective technology to combat it.

This alarm was sounded yesterday by the regional office of the Parana Secretariat of Agriculture in Londrina with the explanation that "corn smut" (the disease is scientifically identified as "Sphacelothica reiliana"), heretofore affecting crops without major economic significance, has caused great damage to the crop now being harvested. According to the secretariat experts, this year corn smut has struck an area of 131,000 hectares planted with corn in the municipalities of Ivaiporan, Munhoz de Mello, Jardim Alegre and Candido de Abreu, causing losses of 55,000 tons, or 934 sacks of corn with a loss to the state of 1.8 billion cruzeiros.

According to the experts, the disease is favored by excess humidity and high temperatures and its symptoms are easily recognized by farmers: "The first symptoms show up on the plant shoots which begin to be coated with a silvery white film. This occurs especially during the formation of the ears and tassels and may change the floral structures into an obscure mass. In addition, the plants so attacked do not produce pollen, thus aborting the blossoms, and are usually smaller than healthy plants."

Agronomists of the Parana Secretariat of Agriculture are concerned about the intensification of the disease in this crop (until now the incidence of infection was low in the state) inasmuch as no adequate control of corn smut is known in Brazil.

# Disease Attacks Corn Stalks

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 6 Apr 83 p 26

Text Curitiba-Corn smut, a disease still without chemical control in Brazil, is increasing in Parana's crops where it has already caused damage in excess of 1.8 billion cruzeiros.

Experts from the State Agricultural Secretariat are warning that it is necessary to control the disease by crop rotation and greater care in nitrogen and organic fertilizing which favor the development of the fungus.

The cities most affected by corn smut in Parana are in the central area of the state.

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END